

Getting Pest Management Products Registered for Canaryseed

Canaryseed Development Commission of
Saskatchewan
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Process

1. Canadian crop protection product labels
 - ❖ Add canaryseed grown for human consumption to representative labels registered for use on canaryseed
 - ❖ Obtain Canadian Maximum Residue Limits (MRLs) for each active ingredient
2. Obtain A Priorities for new active ingredients through the User Requested Minor Use Label Extension (UMRMULE) process
3. Seek registrations for new active ingredients through direct cooperation between CDCS, registrants and the Canadian research community
4. Add canaryseed to North American Crop Group 15B (CG15B)
 - ❖ Harmonizes Canadian and U.S. regulatory issues
 - ❖ U.S. MRLs
5. Add canaryseed to Codex Crop Subgroup 020B (CS020B)
 - ❖ Codex MRLs

Canadian Crop Protection Product Labels

- Transition Canadian crop protection product labels from canaryseed (feed) to canaryseed grown for human consumption
1. All products registered on canaryseed, wheat and barley
 2. All products ranked as priorities by the CDCS Board
 3. New active ingredients of potential future value
- 42 herbicides
 - 13 fungicides (now 14)
 - 9 insecticides (now 10)

Canadian Crop Protection Product Labels Phase 1 (Approved by PMRA / Labelled)

H	F	I	Active ingredient	Product Name	Registrant
	x		propiconazole	Tilt 250E Fungicide	Syngenta Canada Inc.
		x	dimethoate	Cygon 480-AG Systemic Insecticide	FMC Corporation
		x	dimethoate	Cygon 480 EC Systemic Insecticide	Interprovincial Cooperative Ltd
		x	dimethoate	Lagon 480E Insecticide	Loveland Products Canada Inc.
		x	malathion	Malathion 85E	Loveland Products Canada Inc.
		x	malathion	Fyfanon 50% Emulsifiable Concentrate	FMC Corporation

Canadian Crop Protection Product Labels PRMA Review (D.3.2)

H	F	I	Active ingredient	Product Name	Registrant
x			bromoxynil	IPCO Brotex 240 Liquid Herbicide	Interprovincial Cooperative Ltd
x			bromoxynil	IPCO Brotex 480 Liquid Herbicide	Interprovincial Cooperative Ltd
x			bromoxynil/MCPA ester	IPCO Logic M Liquid Herbicide	Interprovincial Cooperative Ltd
x			clopyralid/MCPA ester + fluroxypyr	Prestige XC	Corteva Agriscience
x			dicamba/MCPA amine/MCPP amine	IPCO Tracker XP Liquid Herbicide	Interprovincial Cooperative Ltd
x			pyraflufen-ethyl/2,4-D ester	BlackHawk Herbicide	Nufarm Agriculture Inc.
x			trallate	Avadex MicroActiv Herbicide	Gowan Canada

Canadian Crop Protection Product Labels PMRA Audit (D.3.1)

H	F	I	Active ingredient	Product Name	Registrant
x			bromoxynil/MCPA ester/fluroxypyr	Enforcer M Herbicide	Nufarm Agriculture Inc.
x			clopyralid/MCPA ester	Curtail M	Corteva Agriscience
x			dicamba/MCPA amine/MCPP amine	Sword Commercial Herbicide	Loveland Products Canada Inc.
x			fluroxypyr/MCPA ester	Prestige XL Herbicide	Corteva Agriscience
x			pyraflufen-ethyl/MCPA	GoldWing	Nufarm Agriculture Inc.
		x	flonicamid	Beleaf 50SG Insecticide	ISK Biosciences Corp.

Canadian Crop Protection Product Labels

Registrant support for registration

H	F	I	Active ingredient	Product Name	Registrant
x			fluroxypyr + MCPA Ester	Trophy Herbicide Tank Mix	NuFarm Agriculture Inc.
x			pyraflufen ethyl/bromoxynil	Conquer Herbicide	Nufarm Agriculture Inc.

Canadian Crop Protection Product Labels

Projects initiated by CDCS
outside of the formal minor use process

H	F	I	Active ingredient	Product Name	Registrant
	x		azoxystrobin + propiconazole	Quilt fungicide	Syngenta Canada Inc.
	x		azoxystrobin + propiconazole	Quilt XCEL fungicide	Syngenta Canada Inc.
	x		azoxystrobin + propiconazole + A21461	New unnamed fungicide	Syngenta Canada Inc.

Canadian Crop Protection Product Labels

Active Ingredients with Issues

(propiconazole)

H	F	I	Active ingredient	Product Name	Registrant
	x		propiconazole	Bumper 432 EC Fungicide	ADAMA
	x		propiconazole	Fitness Fungicide	Loveland Products Canada Inc.
	x		propiconazole	IPCO Pivot 418 EC fungicide	Interprovincial Cooperative Ltd
	x		propiconazole	NuFarm Propiconazole Fungicide	Nufarm Agriculture Inc.
	x		propiconazole	Propel Fungicide	Syngenta Canada Inc.
	x		propiconazole	Propi Super 25EC	Sharda Cropchem Limited

- Syngenta owns the data package
 - ✓ May not support sharing the data package with generic manufacturers
 - ✓ Will support registration of Tilt on canaryseed grown for human consumption

Canadian Crop Protection Product Labels

No Registrant Support

H	F	I	Active ingredient	Product Name	Registrant
x			dicamba ←	Banvel II Herbicide	BASF Canada Inc.
x			dicamba/MCPA amine/MCPP amine	Target Liquid System Herbicide	Syngenta Canada Inc.
x			glyphosate	Roundup WeatherMax	Monsanto Canada Inc.
x			saflufenacil ←	Heat LQ	BASF Canada Inc.
x			tribenuron-methyl	Express SG Herbicide Soluble Granules	FMC Corporation
	x		propiconazole/tebuconazole ←	Prosaro 250EC/XTR Fungicide	Bayer CropScience Canada Inc.
	x		tebuconazole	Folicur 250 EW Fungicide	Bayer CropScience Canada Inc.
		x	flupyradifuron ←	Sivanto Prime Insecticide	Bayer CropScience Canada Inc.

- BASF will not support Heat LQ without a tank-mix with glyphosate
 - ✓ Glyphosate went through re-evaluation recently
 - ✓ Acceptable Daily Intake lowered with direct and negative impact to the Risk Cup
 - ✓ No new use patterns permitted until registrant clarifies issues with PMRA
- Banvel II
 - ✓ BASF will support new formulation of dicamba in Engenia herbicide
- Prosaro fungicide and Sivanto Prime insecticide
 - ✓ On hold pending resolutions of MRL status in the United States

Canadian Crop Protection Product Labels – Other Herbicides

H	F	I	Active ingredient	Product Name	Registrant
				Nufarm Enforcer M	
x			bromoxynil	Bromax Liquid Herbicide	Loveland Products Canada Inc.
x			bromoxynil	Bromotril 11 240 EC	ADAMA
x			bromoxynil	NuFarm Koril 235 Liquid Herbicide	Nufarm Agriculture Inc.
x			bromoxynil	Partner	Bayer CropScience Canada Inc.
x			bromoxynil/MCPA ester	Badge II Liquid Herbicide	ADAMA
x			bromoxynil/MCPA ester	Buctril M	Bayer CropScience Canada Inc.
x			bromoxynil/MCPA ester	Mextrol 450 Liquid Herbicide	Nufarm Agriculture Inc.
x			bromoxynil/MCPA ester + fluroxypyr	Forcefighter M	ADAMA
x			dicamba	Hawkeye Power Herbicide Solution	Gharda Chemicals Ltd
x			dicamba	Oracle Dicamba Agricultural	Gharda Chemicals Ltd
x			dicamba	DuPont FeXapan Herbicide	FMC Corporation
x			dicamba	Dycleer Agricultural Herbicide	Syngenta Canada Inc.
x			dicamba	Engenia Herbicide Solution	BASF Canada Inc.
x			dicamba	G7840 Herbicide	Gharda Chemicals Ltd
x			dicamba	XtendiMax with VaporGrip Technology	Monsanto Canada Inc.
x			difenzoquat	Avenge 200-C Difenzoquat Liquid	Amvac Chemical Corporation
x			gramoxone	Gramoxone Liquid Herbicide	Syngenta Canada Inc.
x			quinclorac	Accord Dry Flowable Herbicide	BASF Canada Inc.
x			quinclorac	Clever Dry Flowable Herbicide	Productierra Inc.
x			quinclorac	Ensure Dry Flowable Herbicide	WOC Inc.
x			quinclorac	Facet L Herbicide	BASF Canada Inc.
x			quinclorac	Ingenious Herbicide	Productierra Inc.
x			quinclorac	MasterLine Quinclorac	Univar Canada Ltd.

← IPCO Brotex
240 and 480

← IPCO
Logic M

← Loveland Sword
IPCO Tracker XP

Brand Specific Registration

BASF, Bayer, Corteva, FMC, ISK Biosciences (registrant only), Gowan, Loveland, Nufarm and Syngenta support URMULE initiatives

Some companies have declined to respond to requests for regulatory support for URMULEs

Only specific brands registered for use on canaryseed grown for human consumption may be applied to crops destined for food use

Brand Specific Registration

Lagon 480 E Insecticide (dimethoate) Registration Number 9382

For the control of aphids on annual canarygrass in

NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE.

APPLICATIONS:

Canada

The DIRECTIONS FOR USE for this product for the use described below were developed by persons other than Loveland Products Canada Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Loveland Products Canada Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crop listed below.

URMULE program

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Loveland Products Canada Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the use described below.

ANNUAL CANARYGRASS

<u>CROP</u>	<u>PEST</u>	<u>RATE PER HA</u>	<u>MAXIMUM NO. OF APPLICATIONS PER YEAR</u>	<u>PREHARVEST INTERVALS (DAYS)</u>	<u>AMOUNT PER 10 LITRES</u>
Annual canarygrass	Aphids	500 mL	1	21	5 mL

COMMENTS: Apply in aerial or ground application when there are more than 50 aphids per canary seed head between heading and soft dough stage. May be applied by Ground and Aerial application.

May be applied a maximum of 1 time per year. All activities: REI is 12 hours. To protect pollinators, follow the instructions regarding bees in the Environmental Precautions section. TOXIC to bees. Avoid application during the crop blooming period. If applications must be made during the crop blooming period, restrict applications to evening when most bees are not foraging. When using managed bees for pollination services, DO NOT apply during the crop blooming period.

Annual canarygrass seeds can be harvested for human consumption.

Annual canarygrass grown for human consumption is not to be cut for feed or grazed.

Annual canarygrass seeds can be harvested for human consumption

Maximum Residue Limit (MRL)

“Dis-Harmonization” (I)

- MRLs not harmonized between countries
 - ✓ MRL of **importing** country is lower than **exporting** country
 - ✓ No MRL in the importing country
 - ✓ Lack of economic interest in requesting the establishment of an MRL
 - ✓ Time required to develop MRL for an active ingredient is lengthy
 - ✓ Cost of developing the required registration data package is high
- Precipitates a range of possible reactions in the importing country
 - ✓ Importing country chooses to use its national MRL from its “Positive List”
 - ✓ Should a Positive List not be available, the importing country may defer to:
 - ❖ The Codex MRL
 - ❖ A default MRL or tolerance
 - ❖ The exporting country’s MRL

Maximum Residue Limit (MRL)

“Dis-Harmonization” (II)

- Meeting established MRLs is generally not an issue
- Meeting the near-zero default tolerances that apply when an MRL has not been established is an issue
- Codex has structural MRL gaps
 - ✓ Why have MRLs not been established?
 - ✓ Codex process is unique in that it almost always guarantees an MRL gap for any new chemistry
 - ✓ An issue for both major and ‘minor’ crops
 - ✓ However, this is particularly true for minor crops

Maximum Residue Limit (MRL)

“Dis-Harmonization” (III)

- Countries such as Japan, New Zealand and the EU region specify a default residue limit for active ingredients not specifically listed by their jurisdiction
 - ✓ Default MRLs for Japan and the EU are **0.01** ppm
 - ✓ Default MRLs for New Zealand are **0.10** ppm
- Where there is no Positive List for a jurisdiction and no default MRL . . .
 - ✓ An MRL is not necessarily set to zero
 - ✓ In such cases, if a compound were to be detected in a commodity, the action taken by the importing country is not always clear
 - ✓ Some jurisdictions have signalled that there may be room for negotiation . . .
 - ❖ The Codex MRL
 - ❖ A default MRL or tolerance
 - ❖ The exporting country's MRL